

## REMARKS

The Official Action dated June 30, 2003, has been carefully considered. Accordingly, the changes presented herewith, taken with the following remarks, are believed sufficient to place the present invention in condition for allowance. Reconsideration and allowance of all remaining claims is respectfully requested.

Claims 16-32 and 35-38 have been amended, and claim 39 has been added, all amendments and additions finding support in the specification as filed. It is believed that these changes and additions do not involve any introduction of new matter, whereby entry is believed to be in order and is respectfully requested. Claims 16-39 remain in the case for consideration.

In the Official Action, claims 16-37 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point and distinctly claim the subject matter Applicants regard as the invention. Particularly, the Examiner asserted that claims 16 and 37 were indefinite and confusing in recitation of "a poly(alkylene glycol) alkyl ether." However, this rejection is traversed as the claims recite a "poly (alkylene glycol) ether," and, as such, the Applicants do not believe claims 16 and 37 are indefinite or confusing. Therefore, the Examiner's rejection of claims 16-37 under 35 U.S.C. § 112, second paragraph, has been overcome and reconsideration is respectfully requested.

In the Official Action, claims 16-31, 34-36 and 38 were rejected under 35 U.S.C. § 102(b) as being anticipated by the Romano et al WO 97/31093 (hereinafter referred to as "Romano et al"). The Examiner asserted that Romano et al disclose a disinfecting composition having a disinfecting agent including peroxy bleach and anti-microbial essential oil or active thereof with a poly(alkylene glycol) ether being a preferred hydrophobic nonionic surfactant, where the disinfecting composition may also include conventional additives.

However, as will be set forth in detail below, it is submitted that the compositions defined by claims 16-31, 34-36 and 38 are not anticipated by Romano et al. Accordingly, this rejection is traversed and reconsideration is respectfully requested.

As defined by claim 16, from which claims 17-36 depend, the present invention is directed to a liquid disinfecting composition comprising an effective disinfecting amount of a disinfecting material and one or a mixture of poly (alkylene glycol) ethers. The disinfecting material includes a peroxygen bleach, while the poly (alkylene glycol) ethers have the formula  $R_1-O-(CH_2-CHR_2O)_n-R_3$ .  $R_1$  and  $R_2$  are each independently hydrogen or a substituted or unsubstituted, saturated or unsaturated, linear or branched hydrocarbon chain having from 1 to 30 carbon atoms or a hydroxy bearing linear or branched hydrocarbon chain having from 1 to 30 carbon atoms. However,  $R_1$  and  $R_2$  are not both hydrogen.  $R_3$  is a substituted or unsubstituted, saturated or unsaturated, linear or branched hydrocarbon chain having from 1 to 30 carbon atoms or a hydroxy bearing linear or branched hydrocarbon chain having from 1 to 30 carbon atoms. Finally,  $n$  is greater than 2.

Claim 38 is directed to a liquid disinfecting composition comprising an effective disinfecting amount of a disinfecting material and 0.001% to 10%, by weight of the total composition, of a component selected from the group consisting of poly (propylene glycol) mono butyl ether, poly(ethylene glycol-co-propylene glycol) mono butyl ether, poly (ethylene glycol) dimethyl ether, poly (ethylene glycol-co-propylene glycol) dimethyl ether, poly (ethylene glycol) stearate and mixtures thereof. The disinfecting material includes a peroxygen bleach.

However, Applicants find no teaching by Romano et al of the liquid disinfecting compositions defined by claims 16 and 38. That is, Romano et al disclose a disinfecting composition including a peroxygen bleach, an amphoteric surfactant, glutaraldehyde and an antimicrobial essential oil or an active thereof (abstract). Particularly, Romano et al disclose

additional components for the disinfecting composition, including nonionic surfactants, such as fatty alcohol ethoxylates and/or propoxylates (page 13, lines 20-24), and that preferred hydrophobic nonionic surfactants have the linear formula  $RO-(C_2H_4O)_n(C_3H_6O)_mH$ , where R is a  $C_6$  to  $C_{22}$  alkyl chain or a  $C_6$  to  $C_{28}$  benzene chain and  $n+m$  is from 0 to 20 (page 13, lines 36-37 - page 14, lines 1-5).

Anticipation under 35 U.S.C. § 102 requires the disclosure in a single prior art reference of each element of the claims under consideration, *Alco Standard Corp. v. TVA*, 1 U.S.P.Q.2d 1337, 1341 (Fed. Cir. 1986). However, Romano et al fail to teach a liquid disinfecting composition as defined in claims 16 and 38, respectively, particularly including a poly (alkylene glycol) ether of the defined formula wherein at least one of  $R_1$  and  $R_2$  is not hydrogen. The Examiner appears to assert that the propoxylated embodiment of Romano et al's fatty alcohol is equivalent to the poly (alkylene glycol) ether of claim 16 when  $R_1$  is H and  $R_2$  is methyl. However, Applicants find no teaching by Romano et al that their  $(C_3H_6O)$  is a branched propyl group containing a  $-CH_3$  moiety. To the contrary, Romano et al's nonionic surfactant is linear in configuration. Moreover, each of the examples for the nonionic surfactants in Romano et al illustrate that  $m=0$ , which further supports that Romano et al do not teach the defined formula in the composition as set forth in claim 16 within the meaning of 35 U.S.C. §102. Furthermore, the specific poly (alkylene glycol) ethers set forth in claim 38 are not disclosed in Romano et al. Therefore, Romano et al do not anticipate the liquid disinfecting compositions of claims 16 and 38, respectively, under 35 U.S.C. § 102.

It is therefore submitted that the liquid disinfecting compositions defined by claims 16-31, 34-36 and 38 are not anticipated by and are patentably distinguishable from Romano et al and the rejection of claims 16-31, 34-36 and 38 under 35 U.S.C. § 102 has been overcome. Reconsideration is respectfully requested.

Claims 16-20, 21-23, 26-32, 34-35 and 38 were rejected under 35 U.S.C. § 102(b) as

being anticipated by Evers et al WO 97/42276 (hereinafter referred to as “Evers et al”). The Examiner referenced Examples 1-11, and asserted that Evers et al disclose non-streaking, disinfecting, hard surface cleaners having a hydrophilic nonionic surfactant that can be a poly (alkylene glycol) alkyl ether, and an alcohol for cleaning surfaces.

However, as will be set forth in detail below, it is submitted that the compositions defined by claims 16-20, 21-23, 26-32, 34-35 and 38 are not anticipated by Evers et al. Accordingly, this rejection is traversed and reconsideration is respectfully requested.

Applicants find no teaching by Evers et al of the liquid disinfecting compositions defined by independent claims 16 and 38, respectively. Evers et al teach a hard surface cleaner, which provides no visible streaks or residues, and includes combination of a hydrophobic nonionic surfactant with a selected alcohol, and a sulfated anionic surfactant (abstract). Evers et al also disclose that suitable hydrophobic nonionic surfactants include alkoxyated alcohols, such as ethoxyated alcohols (page 4, lines 18-19). Examples 1-11 of Evers et al employ specific ethoxyated alcohols. However, Applicants find no disclosure relating to poly (alkylene glycol) ethers as defined in claim 16, where R<sub>1</sub> and R<sub>2</sub> cannot both be hydrogen. Furthermore, Applicants find no mention of the poly (alkylene glycol) ethers recited in claim 38.

Moreover, Applicants find no teaching or suggestion in Evers et al that their disinfecting compositions would be improved by the addition of a poly (alkylene glycol) ether as defined in claim 16, or by the incorporation of the specific compounds recited in claim 38.

Rejection for anticipation or lack of novelty requires, as the first step in the inquiry, that all the elements of the claimed invention be described in a single reference. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989), *cert denied*, 493 U.S. 853 (1989). In view of the deficiencies in the Evers et al teachings, Evers et

al do not anticipate claims 16 or 38, respectively, under 35 U.S.C. § 102.

It is therefore submitted that the liquid disinfecting compositions defined by claims 16-20, 21-23, 26-32, 34-35 and 38 are not anticipated by and are patentably distinguishable from Evers et al and the rejection of claims 16-20, 21-23, 26-32, 34-35 and 38 under 35 U.S.C. § 102 has been overcome. Reconsideration is respectfully requested.

Claim 38 was rejected under 35 U.S.C. § 102(b) as being anticipated by the Malik U.S. Statutory Invention Reg. H269 (hereinafter referred to as “Malik”). The Examiner asserted that Malik discloses a liquid disinfectant and/or sanitizer cleaning composition that may include surfactants having mono-lower alkyl C<sub>1</sub> to C<sub>6</sub> ethers.

However, as will be set forth in detail below, it is submitted that the liquid disinfecting compositions defined by claim 38 are not anticipated by Malik. According, this rejection is traversed and reconsideration is respectfully requested.

Applicants find no teaching by Malik of the liquid disinfecting compositions defined by claim 38. Malik teaches disinfectant and/or sanitizer cleaning compositions in a homogeneous aqueous solution comprising water, a germicidal quaternary ammonium halide compound and a glycoside surfactant (abstract). In addition, Malik discloses that water miscible organic solvents suitable for use in the compositions can include alkylene glycols and/or ethers thereof (e.g., mono-lower alkyl, C<sub>1</sub> to C<sub>6</sub> ethers) (col. 6, lines 64-67). However, Applicants find no mention by Malik of compositions comprising peroxygen bleach disinfecting material in combination with a component selected from the group recited in claim 38.

To anticipate, every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim. *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383, 58 U.S.P.Q.2d 1286, 1291 (Fed. Cir. 2001); *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 927 F.2d 1565, 1576, 18 U.S.P.Q.2d 1001, 1010

(Fed. Cir. 1991). In view of the failures of Malik to teach a liquid disinfecting composition having a peroxygen bleach as defined in claim 38, Malik does not disclose each element of the claims under consideration, and therefore, does not anticipate the liquid disinfecting compositions of claim 38, under 35 U.S.C. § 102.

It is therefore submitted that the liquid disinfecting compositions defined by claim 38 are not anticipated by and are patentably distinguishable from Malik, and the rejection of claim 38 under 35 U.S.C. § 102 has been overcome. Reconsideration is respectfully requested.

Claims 32-33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Romano et al as applied to claims 16-31, 34-36 and 38 above, and further in view of Romano et al WO 97/25106 (hereinafter referred to as "Romano II"). The Examiner asserted that Romano II teach disinfecting compositions in the form of the primary reference composition packaged in a spray dispenser (page 19) and impregnated into wipes (page 20).

However, Applicants submit that claims 32-33 are nonobvious over Romano et al in view of Romano II. Accordingly, this rejection is traversed and reconsideration is respectfully requested.

The deficiencies of Romano et al are discussed above. Romano II do not resolve these deficiencies as Applicants found no teaching or suggestion by Romano II of liquid disinfecting compositions comprising ethers of the defined formula recited in claim 16, or of a type as recited in claim 38.

References relied upon to support a rejection under 35 U.S.C. §103 must provide an enabling disclosure, i.e., they must place the claimed invention in the possession of the public, *In re Payne*, 203 U.S.P.Q. 245 (CCPA 1979). The failures of Romano et al are not remedied by the combination with Romano II. In view of the failure of Romano et al and Romano II to teach or suggest compositions comprising a poly (alkylene glycol) ether as

defined in claim 16, and in view of the failure to teach or suggest incorporation of the specific compounds recited in claim 38, particularly in combination with the remaining limitations of these claims, Romano et al and Romano II do not support a rejection under 35 U.S.C. § 103. Applicants therefore submit that the 35 U.S.C. § 103 rejection based on Romano et al in view of Romano II has been overcome. Reconsideration is respectfully requested.

It is believed that the above amendments and remarks represent a complete response to the rejections under 35 U.S.C. §§ 102, 103 and 112, second paragraph, placing the present application in condition for allowance. Reconsideration and an early allowance are requested.

Respectfully submitted,



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